

RESEARCHUPDATE

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Nicotine Addiction Associated with Use of Alcohol and Other Drugs

Nicotine is the primary addictive substance in cigarettes and other types of tobacco products. The behavioral and pharmacologic processes that determine nicotine addiction are similar to those that determine alcohol and other drug addiction.¹

What Does the Research Show?

Smoking Mortality and Prevalence

Cigarette smoking is a widespread public health problem in the United States, and the single most preventable cause of premature death.² One out of every five deaths in the US is smoking-related, and each year more than 400,000 Americans die from cigarette smoking.² There are 43 known carcinogens in tobacco smoke.³ Smoking is the primary cause of 87% of deaths from lung cancer, 82% of deaths from pulmonary disease, 21% of coronary heart disease deaths, and 18% of stroke deaths.³

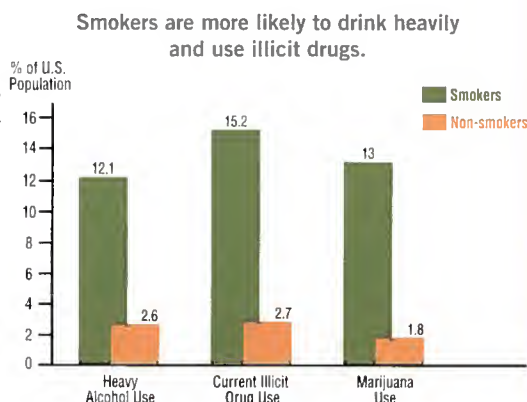
Various surveys measure the prevalence of cigarette smoking in the United States. One of the earliest surveys is the National Health Interview Survey of adults age 18 and older conducted since 1965 by the Centers for Disease Control and Prevention.⁴ Cigarette smoking in the United States declined from 42% of the adult population in 1965 to 25.5% in 1994. Smoking among males fell from 52% to 28%, and among females from 34% to 23%. According to this survey 25.5 % of the total adult population, or 48 million adults age 18 and older smoked in 1994.⁴ The National Household Survey on Drug Abuse conducted by the Substance Abuse and Mental Health Services Administration interviews a younger population of persons age 12 and older. According to this survey, in 1997 an estimated 64 million Americans age 12 and older were current smokers, or 30% of this population. Among youths age 12-17, females had a higher rate of smoking (20.7 percent) than males (19.1 percent).⁵

Smoking in Relation to Alcohol and Drug Use

Research indicates that a strong association exists between tobacco use and the use of alcohol and other drugs. The prevalence of alcohol and illicit drug use is greater among smokers than non-smokers.⁶ See inserted table.

The nature of the association between nicotine and other drug use is not fully understood and an area of continuing research. One research team suggests links between alcohol and smoking may be due to situational association, interaction effects between two drugs, or characteristics of individuals that may predispose to both drugs of abuse.

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Source: National Household Survey, 1997 preliminary estimates, Substance Abuse and Mental Health Services Administration. Heavy alcohol use = 5 or more drinks on 5 or more days in past month.

THE HAZELDEN EXPERIENCE

Hazelden has offered a 5-day residential nicotine cessation program since 1990. Entitled "Your Next Step," the program uses a 12-step Alcoholic Anonymous approach in conjunction with individual and group therapy, lectures and assignments, relaxation techniques and acupuncture. It is aimed primarily at people in recovery from alcohol and other drugs. (See note at 18).

A study of 414 program participants found the average age was 49, the average number of years of tobacco use was 32, and the average number of prior quit attempts was 2.3¹⁹. Follow-up at one year post program completion shows that 37% remained tobacco free. Women were more likely than men to relapse. No additional significant differences in outcome were found according to age, work environment, number of friends who smoked, length of smoking history, level of smoking, or current diagnosis of mood disorder.

CONTROVERSIES & QUESTIONS

Nicotine dependence is a persistent public health problem in the United States. The prevalence of smoking is much higher among persons with drug and alcohol problems than the general population. Although chemical dependency treatment providers are well aware of the co-occurrence of these addictions, nicotine dependence is not routinely addressed by the majority of programs.

A pivotal question for managed health care organizations and treatment centers alike concerns reimbursement for smoking cessation. In order to reduce this public health problem, the practice of medicine and chemical dependency treatment must change in order to better provide access to and provision of smoking cessation services. Yet at present, there is a great deal of variability across states and health plans, concerning the extent to which these costs are borne, if at all, by existing public and private health care providers and insurers.

Nicotine Addiction

Situational linkages exist inasmuch as both drugs are used together in the same situations.⁶

Among alcohol and drug dependent populations, the rate of smoking ranges from 71% to 97%.⁷ A recent study followed up 845 people admitted to an inpatient addiction treatment program from 1972 through 1983.⁸

It found that of the 222 subjects who had subsequently died, more died of tobacco-related disease (50.9%) than from alcohol-related disease (34.1%).

Smoking Cessation Among Alcohol and Drug Dependent Clients

In spite of the strikingly high co-occurrence of tobacco use among persons addicted to alcohol and other drugs, smoking cessation historically has not been addressed within the context of alcohol and drug dependency treatment. In recent years, however, a growing and varied body of scientific research has been conducted on smoking cessation and its effect on recovery from addiction to drugs or alcohol.

For example, one study of over 900 inpatients at an alcohol and drug dependency treatment program found that simultaneous treatment for nicotine addiction produced a temporary reduction in smoking and increased motivation to quit smoking.⁹ A prospective study compared abstinence rates 12-months post-treatment for smokers versus non-smokers and found significantly better recovery rates for non-tobacco users.¹⁰ Another recent, long-term study found that continued smoking among recovering alcoholics increased the likelihood of relapse.¹¹ A study of a random sample of 1,200 health maintenance organization enrollees found that smokers who were also active alcoholics were 60% less likely to quit smoking than smokers with no history of alcoholism, and recovering alcoholics were as likely to quit as smokers with no history of alcoholism.¹²

While the methodologies vary considerably, the research conducted to date generally supports the notion that smoking cessation does not threaten sobriety or recovery from other addictions, and in fact, may even enhance it.¹³⁻¹⁶⁻¹⁸ Additional research is needed to better understand the interrelationships between nicotine and addictions to other substances, and the implications for the treatment of both.¹⁷

How to Use This Information

As health promotion models become more widely accepted and integrated into alcohol and drug dependency treatment settings, programs can learn to incorporate routine nicotine dependence screening into their usual treatment protocols. Assessments can be conducted on all clients entering drug and alcohol treatment, and nicotine cessation services offered to all clients who request it. The challenge to chemical dependency treatment staff is to become educated in the treatment of nicotine addiction, and accept the important role clinicians can play in improving their clients' health and long-term prognosis. Emerging research suggests that simultaneous treatment for nicotine addiction and other addictions, can actually enhance the likelihood of success for both.

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BUTLER CENTER FOR RESEARCH JANUARY 1999

The Butler Center for Research informs and improves recovery services and produces research that benefits the field of addiction treatment. We are dedicated to conducting clinical research, collaborating with external researchers, and communicating scientific findings.

Patricia Owen, Ph.D., Director

If you have questions, or would like to request copies of Research Update, please call 800-257-7800 ext. 4405, email butlerresearch@hazelden.org, or write BC 4, P.O. Box 11, Center City, MN 55012-0011.



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